

## CLAIMS

1. An ultra-low carbon stainless steel which comprises a seal function layer in a surface layer.
2. The ultra-low carbon stainless steel according to claim 1, wherein the seal function layer is formed by an ion implantation method.
3. The ultra-low carbon stainless steel according to claim 1 or 2, wherein the ion is a nitrogen ion.
4. The ultra-low carbon stainless steel according to any one of claims 1 to 3, wherein the ultra-low carbon stainless steel contains carbon in an amount of 0.01% by weight or less.
5. The ultra-low carbon stainless steel according to any one of claims 1 to 4, wherein the ultra-low carbon stainless steel is dehydrogenated in advance.